(19) World Intellectual Property Organization International Bureau



. (1845) 1871) 1871 | 1871) 1871 | 1871) 1873 | 1871 | 1871) 1871 | 1871) 1873 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 | 1874 |

(43) International Publication Date 10 February 2005 (10.02.2005)

PCT

(10) International Publication Number WO 2005/012583 A1

(51) International Patent Classification7: C01G 21/02, H01M 4/57

C22B 13/02,

(21) International Application Number:

PCT/IT2004/000328

(22) International Filing Date:

7 June 2004 (07.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: CH2003A000013

30 July 2003 (30.07.2003) IT

(71) Applicant (for all designated States except US): CAM, S.R.L. [IT/IT]; Via Pedemontana, 13, I-66022 Fossacesia

(72) Inventors; and

- (75) Inventors/Applicants (for US only): MARFISI, Armando [IT/IT]; Via Marciani, 99, I-66034 Lanciano (IT). MARFISI, Bruno [IT/IT]; Via Cipollone, 2, I-66034 Lanciano (IT). MARFISI, Fernando [IT/IT]; Via Cipollone, 2, I-66034 Lanciano (IT).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: UTILIZATION OF LEAD SHAVINGS IN ABRASION MILLS FOR THE PRODUCTION OF LEAD OXIDE

(57) Abstract: Abrasion mills for the production of lead oxide call for the use of mechanically produced lead shavings, taken directly from bars or other adequately titrated lead bars. The flat, helical lead shavings are produced using specially designed equipment. The compression and release of the material produces a press and pull action which stresses the surface, making it rough and subject to flaking. The mechanical compression favors hardening of the surface of the shaving, thus increasing abrasion inside the mill. These shavings are therefore ready for immediate use in the mill, with no need for aging.



